

Application No.: 10/701,261

Docket No.: JCLA7806

In the Specification:

Please amend the Abstract of the disclosure as follows:

"A control chip and a method of reducing electromagnetic interference. The control chip for reducing electromagnetic interference is built inside an integrated circuit. An algorithm is downloaded from an external bus and stored inside the chip. The algorithm and an externally received clock signal are used to spread out the frequency of the electromagnetic interference signal. The clock signal is modulated through the algorithm so that the electromagnetic interference signal at various frequencies is optimally process[.]ed"

Please amend paragraph [0003] as follows:

"[0003] Back in the 1970s, liquid crystal displays ~~are~~ were used in electronic calculators, clocks and watches. Thereafter, the discovery of various types of opto-electronic effects and improvements in driving techniques have led ~~has lead~~ to the production of high picture quality, low power rating, low voltage driven, slim and lightweight liquid crystal displays. At present, LCDs are used in various medium and small portable devices such as portable televisions, image phones, camcorders, notebook computers, desktop monitors and projection color televisions. Gradually, CRT is replaced. The most common present day LCD is the so-called thin film transistor liquid crystal display (TFT-LCD)."

Please amend paragraph [0004] as follows:

"[0004] Among the panel of tests a TFT-LCD that ~~needs~~ needed to be conducted, tolerance against electromagnetic interference (EMI) is very important. If the peak value of some electromagnetic interference exceeds a permitted threshold, the TFT-LCD will fail the EMI test."

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Hence, to pass the EMI test, means are searched to reduce the peak value of electromagnetic disturbance so that it falls within the permitted tolerance level. At present, to reduce the effect of EMI on the TFT-LCD, an additional spread spectrum clock generator (SSCG) is installed in the driving circuit inside the application specific integrated circuit (ASIC) as shown in Fig. 1a. Alternatively, the ASIC may include a built-in SSCG as shown in Fig. 1b. The SSCG will spread out EMI signals according to the input clock signal so that interference by the electromagnetic signal is reduced."

Please amend paragraph [0005] as follows:

"[0005] Fig. 2a is a graph showing the spectral distribution of an electromagnetic interference signal. Assume that the originating frequency is f_0 and width of the EMI signal is w_0 . After spreading out the EMI signal through the SSCG, the originating frequency is still f_0 but the width has changed to w . The method of spreading by the SSCG includes the using of the pulse of an EMI as the center to increase the pulse width of the EMI. According to the energy conservation principle, once the EMI pulse is spread out to a width w , peak value in dB has to drop. Hence, the frequency spectrum after spreading is changed to the one shown in Fig. 2b. Obviously, if the peak value (in dB) of the EMI signal is lowered to a value below a threshold of acceptance, the EMI signal no longer ~~pose~~ poses a problem to the TFT-LCD."